In the Claims:

Kindly modify the claims as follows:

1.   (Currently Amended) A method of allowing entities to cooperate for implementing ~~one or more~~ at least one process ~~processes~~, the method being part of a computer system, comprising:

(a) ~~registering entities as providers of~~ producing objects by at least one entity on hardware;

(b) associating each of the objects with at least one semantic term, said associating done by the at least one entity ~~entities~~ on hardware;

(c) allocating a tuple to each of the at least one semantic terms, the tuple containing information provided by each of the objects ~~object~~ corresponding to a ~~the~~ meaning of the at least one semantic term, allowing the tuple to be found in at least one ~~Tuple Spaces~~ tuple space on hardware;

(d) storing and retrieving information in the form of the tuple ~~tuples~~ on hardware;

(e) using the ~~tuples~~ tuple to represent each of the objects involved in the ~~one or more~~ at least one process ~~processes~~, wherein at least one tuple type ~~each object~~ is registered by ~~an~~ the at least one entity on hardware; ~~and~~

(f) representing ~~the~~ conditions~~, based on semantic terms~~, under which the at least one entity can produce ~~one or more~~ at least one of the objects~~,~~ by using at least one tuple template ~~keys~~, ~~said~~ the at least one tuple template ~~keys defined~~ generated by the at least one entity ~~entities~~ on hardware; and

(g) associating the at least one tuple template and the tuple with the at least one semantic term to form a type.

2. (Canceled)

3. (Currently Amended) The method of claim 1 further comprising:

(<u>h</u> ~~g~~) indicating ~~one or more of any of~~ the <u>at least one</u> semantic <u>term</u> ~~terms~~ in any order to represent a goal of the <u>at least</u> one <u>process</u> ~~or more processes~~.

4. (Currently Amended) The method of claim 1 further comprising:

(<u>h</u> ~~g~~) generating streams representing chains of events composed of sequential events which terminate at the ~~tuples~~ <u>tuple</u> corresponding to each <u>of the at least one</u> semantic <u>terms</u> ~~term~~.

5. (Currently Amended) The method of claim 1 further comprising:

(<u>h</u> ~~g~~) generating semantic categories by aggregating any of the <u>at least one</u> semantic terms in any order.

6. (Canceled)

7. (Currently Amended) An apparatus for allowing entities to cooperate for implementing ~~one or more~~ <u>at least one process</u> ~~processes~~, the apparatus being part of a computer system,comprising:

(a) means for ~~registering entities as providers of objects~~ <u>producing objects by at least one entity on hardware</u>;

(b) means for associating each <u>of the objects</u> ~~object~~ with at least one semantic term, said means for associating done by the <u>at least one entity on hardware</u> ~~entities~~;

(c) means for allocating a tuple to each of the at least one semantic terms, the tuple containing information provided by <u>each of</u> the <u>objects</u> ~~object~~ corresponding

to a ~~the~~ meaning of the at least one semantic term, allowing the tuple to be found in at least one ~~Tuple Spaces~~ tuple space on hardware;

(d) means for storing and retrieving information in the form of the tuple ~~tuples~~ on hardware;

(e) means for using the tuple to represent each of the objects involved in at least one process, wherein at least one tuple type is registered by the at least one entity on hardware ~~represent objects involved in one or more processes by using the tuples, wherein each object is produced by an entity~~; and

(f) means for representing ~~the~~ conditions~~, based on semantic terms~~, under which the at least one entity can produce ~~one or more~~ at least one of the objects~~,~~ by using at least one tuple template ~~keys, said~~ the at least one tuple template ~~keys defined~~ generated by the at least one entity ~~entities~~ on hardware; and

(g) means for associating the at least one tuple template and the tuple with the at least one semantic term to form a type.

8. (Canceled)

9. (Currently Amended) The apparatus of claim 7 further comprising:

(h ~~g~~) means for indicating ~~one or more of any of~~ the at least one semantic term ~~terms~~ in any order to represent a goal of the at least one process ~~or more processes~~.

10. (Currently Amended) The apparatus of claim 7 further comprising:

(h ~~g~~) means for generating streams representing chains of events composed of sequential events which terminate at the ~~tuples~~ tuple corresponding to each of the at least one semantic terms ~~term~~.

11. (Currently Amended) The apparatus of claim 7 further comprising:

(h ~~g~~) menas for generating semantic categories by aggregating any of the at least one semantic terms in any order.

12 - 18. (Canceled)

19. (New) The method of claim 1, further comprising:

(h) replacing the at least one tuple template from the tuple on hardware, wherein the at least one tuple template and the tuple are of the same tuple type.

20. (New) The method of claim 7, further comprising:

(h) replacing the at least one tuple template from the tuple on hardware, wherein the at least one tuple template and the tuple are of the same tuple type.